Part II—General Procedures (Minimum Requirements)

A. Authority to require test

State laws and/or regulations shall provide authority to apply a tuberculin test to any animal or herd at such times as may be deemed necessary by the cooperating State or Federal officials. These officials reserve the right to supervise any test conducted by an accredited veterinarian.

B. Personnel authorized to apply tuberculin tests

Tuberculin tests shall be applied by a veterinarian employed in a full-time capacity by the State or USDA or by an accredited veterinarian. Technicians employed by State or Federal governments and approved by said governments may conduct routine screening tuberculin tests when directly supervised by State or Federal veterinarians.

C. Approved laboratories

The primary laboratory for all tuberculosis diagnostic purposes shall be the National Veterinary Services Laboratories (NVSL), Ames, IA. Food Safety and Inspection Service (FSIS) laboratory results are acceptable for tissue examination of regular-kill slaughter cattle or bison in those cases where no submission was made to NVSL.

D. Presumptive diagnostic test

The caudal-fold test (CFT) is the official tuberculin test for routine use in individual cattle, bison, or goats and herds of such animals where the tuberculosis status of the animals is unknown. The single cervical tuberculin (SCT) test is the official tuberculin test for routine use in individual captive cervids and herds of such animals whose tuberculosis status is unknown.

An affected herd is a herd in which tuberculosis has been disclosed in any cattle, bison, captive cervid, or goat by an official tuberculin test or by postmortem examination. Currently, histopathology, diagnostic bacteriology, and polymerase chain reaction (PCR) analysis of formalin-fixed tissue are all supplemental diagnostic procedures approved for use in the program. These procedures should be used in conjunction with tuberculin test results and necropsy or slaughter data to assign herd status.

E. Supplemental diagnostic test

The comparative cervical test (CCT) is the official tuberculin test for retesting of suspects. It shall be applied only by a full-time State or Federal regulatory veterinarian and shall not be used in known-infected herds without the prior written consent of cooperating State—Federal officials. The CCT test shall not be used as a primary test for animals of unknown status. The CCT or the blood tuberculosis (BTB) test will be used for retesting captive cervid suspects.

F. Primary diagnostic test

- The cervical tuberculin (CT) test is the recommended test for use in herds
 affected with bovine tuberculosis and is required as the initial test for testing
 exposed cattle or bison from such herds. Only by a veterinarian employed in
 full-time capacity by the State or Federal Government shall apply the CT.
- 2. The caudal-fold (CFT) test is a primary diagnostic test in cattle, bison, or goat herds when used in lieu of the CT test in herds affected with bovine tuberculosis. Responses shall warrant the reactor classification. Only by a veterinarian employed in full-time capacity by the State or Federal Government shall apply the CFT.
- The single cervical tuberculin (SCT) test is the primary test for use in captive cervid herds affected with bovine tuberculosis. In such herds, the SCT test shall be applied only by a veterinarian employed by the State or Federal Government.

G. Tuberculin test interpretation

- Decisions will be based upon the professional judgment of the testing veterinarian in accordance with the policy established by the cooperating State and Federal officials and the test requirements discussed in these UMR under Part III, section A, or Part IV, section A, Classification.
- The injection site on each animal shall be palpated. Observation without palpation is not acceptable and shall constitute cause for removal of veterinary accreditation.

H. Cleaning and disinfection of premises, conveyances, and materials

All premises—including all structures, holding facilities, conveyances, and materials—that are determined by the appropriate cooperating State—Federal officials to constitute a health hazard to humans or animals because of tuberculosis shall be properly cleaned and disinfected. This shall be done in accordance with procedures approved by said officials within 15 days after the removal of tuberculosis-affected or -exposed cattle and bison. However, these officials, for reasons satisfactory to them, may extend the time limit for disinfection to 30 days when a request for such extension is received before the expiration date of the original 15-day period allowed.

I. Determination of the State-of-origin of infection

Tuberculosis found during slaughter inspection or otherwise in any livestock will be considered to have originated in the State where the animal was slaughtered or the disease was disclosed unless successful traceback procedures identify another State as the original source.

2. To be eligible for Federal indemnity, exposed swine shall be identified by tagging with a serially numbered metal eartag attached to either ear. All such animals to be destroyed shall be transported to the place of destruction in vehicles closed with official seals or shall be accompanied to the place of destruction by a Federal or State representative. The aforementioned conditions prevail provided that animals destroyed and disposed of under the direct supervision of a Federal or State representative on the premises where the animals were exposed do not require individual identification.

I. Quarantine procedures (cattle and bison)

- 1. All herds in which reactor animals are disclosed shall be quarantined. Exposed animals must remain on the premises where disclosed unless a State or Federal permit has been obtained. Movement for immediate slaughter must be directly to a slaughtering establishment where approved State or Federal inspection is administered. Exposed animals must be identified by official eartags. Use of "S" brand is required unless animals are shipped in a sealed vehicle under permit, or accompanied to slaughter by a State or Federal representative.
- Sale of feeder calves from quarantined herds shall be restricted. Feeder calves under 12 months of age that have passed a CFT test within 60 days may be permitted to move intrastate to a quarantined feedlot.
- 3. Herds in which Mycobacterium bovis infection has been confirmed shall remain under quarantine if not depopulated and must pass two tuberculin tests at intervals of at least 60 days, one additional test after 180 days, and three annual whole-herd tests. All animals moved from the farm shall be shipped directly to slaughter and shall be accompanied by a slaughter permit issued by a State or Federal representative. The herd must undergo two additional whole-herd tests after the quarantine is released. These tests may be applied to accreditation status.
- 4. Herds in which only NGL reactor(s) occur and selected tissues are found negative on histopathology and in which no evidence of *Mycobacterium bovis* infection has been disclosed may be released from quarantine only after a negative retest of the entire herd is completed at least 60 days subsequent to slaughter of the NGL reactors.
- 5. Suspects in herds in which at least one suspect and no reactor animals are disclosed shall be quarantined until all suspects are retested and classified negative or shipped directly to slaughter under permit. Herds with only suspects should be quarantined until all suspects are retested and classified negative or shipped directly to slaughter under permit.

Section 9 of the Code of Federal Regulations [CFR], Part 77.5, C, prohibits the interstate movement of suspect cattle and bison and negative cattle or bison in herds containing suspect cattle or bison [except for slaughter] until the tuberculosis status of all suspect(s) has been determined.

If animals are slaughtered as suspects (according to part III, section A(3)) but show no gross lesions, selected tissues are found negative on histopathology, and a complete epidemiologic investigation, including a herd test of all eligible animals, fails to disclose evidence of bovine tuberculosis or exposure thereto, upon concurrence of State and Federal officials the herd may be considered free of bovine tuberculosis. A 60-day herd retest is recommended.

6. Herds indicated as the source(s) of slaughter traceback case investigations shall be placed under quarantine within 30 days of notification, and a herd test of all eligible livestock shall be scheduled.

J. Retest schedules for high-risk herds (cattle and bison)

- In herds with a history of lesions suggestive of bovine tuberculosis (but not confirmed), two complete annual herd tests shall be given after release from quarantine. The first test is to be applied about 1 year after release from quarantine.
- In a newly assembled herd on premises where a tuberculous herd has been depopulated, two annual herd tests shall be applied to all cattle and/or bison. The first test must be applied about 6 months after assembly of the new herd. If the premises are vacated for over 1 year, these requirements can be waived by the DTE.
- 3. Exposed animals previously sold from a known-infected herd shall be depopulated with indemnity if at all possible. If the exposed animal(s) are not depopulated, only the cervical test shall be used as the initial test. All responding animals shall be classified as reactors. If negative to the test, the exposed animal(s) will subsequently be handled as if a part of the infected herd of origin for purposes of testing, quarantine release, and the five annual high-risk tests; also, the remainder of the herd shall be retested in 1 year with the caudal-fold test. The balance of the receiving herd shall initially be tested as follows:
 - a. If lesions of tuberculosis (based on histopathologic examination) are found in the exposed animal(s), the remainder of the herd shall be depopulated or tested, preferably with the cervical test.
 - In all other cases, the remainder of the herd shall be tested by the caudal-fold test. The responding animals may be classified as suspects and retested with the comparative cervical test.

- 4. An animal meeting the suspect criteria on two successive CCT or two BTB equivocal tests followed by one suspect CCT test shall be classified as a reactor and be identified as such. The testing veterinarian must justify exceptions in writing and must have the concurrence of State or Federal animal health officials.
- An animal having two successive equivocal BTB tests may be retested with a CCT after 90 days of the SCT test injection, or may, at the owner s discretion, be sent to slaughter.

F. Identification of reactors (captive cervids)

Reactor captive cervids shall be identified by branding with the letter "T" on the left hip, not less than 2 inches (5 cm) nor more than 3 inches (7.5 cm) high, and by tagging with an official eartag bearing a serial number and the inscription "U.S. Reactor" attached to the left ear of each animal. In lieu of branding, the reactor(s) may be shipped to slaughter in an officially sealed vehicle or accompanied to slaughter by a State–Federal regulatory official, provided that such reactor(s) are tattooed with the letters "TB" in the left ear and these letters are sprayed on the left ear with yellow paint.

G. Quarantine procedures (captive cervids)

- 1. All herds in which reactor animals are disclosed shall be quarantined. The remaining exposed animals must remain on the premises where the disease was disclosed unless a State or Federal permit for movement to slaughter has been obtained. Movement for immediate slaughter must be directly to a slaughter establishment where approved State or Federal inspection is administered. Animals must be identified by official eartag. Use of "S" branding is required as per 9 CFR, Part 50, or animals must be shipped in an officially sealed vehicle or accompanied to slaughter by a State—Federal regulatory official. The "S" brand shall be applied to the left hip.
- 2. If captive cervid herds in which *M. bovis* is confirmed (affected herds) are not depopulated, they shall remain under quarantine. Such herds must also pass three consecutive whole-herd SCT tests at intervals of at least 90 days, one additional test after 180 days, and three annual whole-herd tests. The CCT test shall not be used in affected herds until the completion of two consecutive negative whole-herd tests, or two consecutive whole-herd tests with NGL reactors only, in which selected tissues are negative on the basis of histopathology and culture. The BTB test may also be used, provided that it is used simultaneously with a whole-herd SCT test. The sample for the BTB test may be taken at the time of injection or reading of the SCT test. All animals positive to either test shall be classified as reactors. The herd must undergo two additional whole-herd annual tests after the quarantine is released. These tests may be applied to accreditation status.